

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): A collapsible cylindrical endoprosthesis comprising:
a plurality of longitudinal members in a cylindrical arrangement, each having at least one end;

a plurality of circumferential members connecting the ends of adjacent longitudinal members, the plurality of circumferential members having a length sufficient to maintain a space between the ends of adjacent longitudinal members; and

a plurality of opposed contact surfaces on adjacent longitudinal members near the circumferential members, with the opposed surfaces being oriented relative to each other, wherein, as the endoprosthesis is collapsed, the circumferential members bend until the opposed contact surfaces come together and then continued deflection of the longitudinal members produces stress at the contact surfaces to thereby isolate the ends of the longitudinal members from stress due to forces associated with collapsing the endoprosthesis

wherein the space between at least one pair of adjacent longitudinal members is maintained when the endoprosthesis is collapsed.

Claim 2 (previously presented): The collapsible cylindrical endoprosthesis of claim 1, wherein the manner of bending distributes the stresses throughout the longitudinal members and circumferential members.

Claim 3 (withdrawn): The collapsible cylindrical endoprosthesis of claim 1, wherein the circumferential members comprise a loop.

Claim 4 (withdrawn): The collapsible cylindrical endoprosthesis of claim 1, wherein the circumferential members comprise an eyelet configuration.

Claim 5 (previously presented): The collapsible cylindrical endoprosthesis of claim 1, wherein the circumferential members comprise a merge section of the ends of adjacent longitudinal members.

Claim 6 (previously presented): The collapsible cylindrical endoprosthesis of claim 1, wherein the longitudinal members further comprise a width measured circumferentially and a thickness measured radially wherein the thickness is greater than the width.

Claim 7 (withdrawn): A collapsible cylindrical endoprosthesis comprising:
a plurality of longitudinal members arranged adjacently into a cylindrical configuration each having a first end section, a middle section and a second end section;
a first a plurality of eyelets connecting adjacent longitudinal members at the first end sections;
a second plurality of eyelets connecting adjacent longitudinal members at the second end sections; and
a plurality of merge sections connecting adjacent longitudinal members at the middle section.

Claim 8 (withdrawn): The collapsible cylindrical endoprosthesis of claim 7, wherein the first plurality of eyelets and the second plurality of eyelets connect the same longitudinal members forming pairs of longitudinal members connected at both the first ends and second ends.

Claim 9 (withdrawn): The collapsible cylindrical endoprosthesis of claim 7, further comprising:

opposed contact surfaces on the longitudinal members near the first plurality of eyelets and the second plurality of eyelets wherein the contact surfaces come together when the prosthesis is collapsed.

Claim 10 (withdrawn): The collapsible cylindrical endoprosthesis of claim 9, wherein the first plurality of eyelets and the second plurality of eyelets bend while the endoprosthesis is collapsed until the contact surfaces come together and the longitudinal members bend thereafter.

Claim 11 (withdrawn): The collapsible cylindrical endoprosthesis of claim 7, wherein the stresses due to collapsing the endoprosthesis are distributed between the longitudinal members, the first plurality of eyelets and the second plurality of eyelets.

Claim 12 (withdrawn): The collapsible cylindrical endoprosthesis of claim 8, wherein alternating pairs of longitudinal members define a first longer length between the first end section and the middle section and a second shorter length between the first end section and the middle section.

Claim 13 (withdrawn): The collapsible cylindrical endoprosthesis of claim 12, wherein alternating pairs of longitudinal members define a first longer length between the second end section and middle section, and a second shorter length between the second end section and the middle section.

Claim 14 (withdrawn): The collapsible cylindrical endoprosthesis of claim 12, wherein upon collapsing the endoprosthesis the eyelets connecting alternating pairs of longitudinal members defining the second shorter length nestle below the eyelets connecting alternating pairs of longitudinal members defining the first longer length.

Claim 15 (withdrawn): The collapsible cylindrical endoprosthesis of claim 7, wherein each longitudinal member defines a width measured circumferentially and a thickness measured radially, wherein the thickness is greater than the width.

Claim 16 (withdrawn): A compressible endoprosthesis configured to secure an endoluminal graft within a body lumen, comprising:

a plurality of curved beams arranged longitudinally in a cylindrical structure, each beam having at least one end;

a plurality of merge sections formed by adjacent curved beams merging together;

at least one eyelet formed in a merge section at the ends of adjacent curved beams; and

wherein at least one eyelet provides an anchor for stitching the endoprosthesis to the endoluminal graft.

Claim 17 (withdrawn): The endoprosthesis of claim 16, further comprising:

opposed contact surfaces on the curved beams near the at least one eyelet, wherein the contact surfaces come together when the endoprosthesis is compressed.

Claim 18 (withdrawn): The endoprosthesis of claim 16, wherein the at least one eyelet is configured to distribute stress throughout the curved beams while the endoprosthesis is compressed.

Claim 19 (withdrawn): An expandable endoprosthesis comprising:

a plurality of curved beams arranged longitudinally in a cylindrical structure, each beam having at least one end;

a plurality of merge sections formed by adjacent curved beams merging together; and

at least one bulbous extension formed in a merge section at the ends of adjacent curved beams.

Claim 20 (withdrawn): The endoprosthesis of claim 19, wherein the endoprosthesis is formed from a single integral structure.

Claim 21 (currently amended): A collapsible cylindrical endoprosthesis comprising:
a plurality of curved longitudinal members in a cylindrical arrangement, each having a proximal end and a distal end;

a plurality of proximal connections integrally formed by the proximal ends of adjacent longitudinal members, the plurality of proximal connections having a first length sufficient to maintain a space between the proximal ends of adjacent longitudinal members;

a plurality of distal connections integrally formed by the distal ends of adjacent longitudinal members, the plurality of distal connections having a second length sufficient to maintain a gap between the distal ends of adjacent longitudinal members;

the cylindrical endoprosthesis has a first diameter sized to compress against the interior of a corporeal lumen and a second smaller diameter sized to fit within a delivery catheter; and

the plurality of curved longitudinal members being curved such that upon collapsing the cylindrical endoprosthesis, portions of the curved longitudinal members removed from the proximal and distal ends thereof come into contact to thereby isolate the proximal and distal ends from stresses associated with collapsing the endoprosthesis

wherein certain of the plurality of proximal and distal connections maintain the space between at least one pair of adjacent longitudinal members when the endoprosthesis is collapsed.

Claim 22 (withdrawn): The collapsible cylindrical endoprosthesis of claim 21, wherein the proximal connections further comprise a looped configuration.

Claim 23 (withdrawn): The collapsible cylindrical endoprosthesis of claim 21, wherein the distal connections further comprise a looped configuration.

Claim 24 (previously presented): The collapsible cylindrical endoprosthesis of claim 21, wherein the plurality of curved longitudinal members further comprise pairs of opposed contact surfaces on adjacent members.

Claim 25 (withdrawn): The collapsible cylindrical endoprosthesis of claim 21, further comprising:

a plurality of bulbous extensions attached at the ends of the connections.

Claim 26 (previously presented): The collapsible cylindrical endoprosthesis of claim 1, further comprising an S-shaped connector element.

Claim 27 (previously presented): The collapsible cylindrical endoprosthesis of claim 1, further comprising a plurality of S-shaped connector elements.

Claim 28 (previously presented): The collapsible cylindrical endoprosthesis of claim 1, further comprising five rows of closed cells, adjacent closed cells being connected by connector elements.

Claim 29 (previously presented): The collapsible cylindrical endoprosthesis of claim 21, further comprising an S-shaped connector element.

Claim 30 (previously presented): The collapsible cylindrical endoprosthesis of claim 21, further comprising a plurality of S-shaped connector elements.

Claim 31 (previously presented): The collapsible cylindrical endoprosthesis of claim 21, further comprising five rows of closed cells, adjacent closed cells being connected by connector elements.